



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,882	10/21/2003	Akira Shibata	36213	3883
116 7590 06/28/2007 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			EXAMINER TRAN, NHAN T	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,882	Applicant(s) SHIBATA ET AL.	
	Examiner Nhan T. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/21/2003, 7/21/2005 & 2/22/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 10/21/2003, 7/21/2005 and 2/22/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Drawings

3. **Figure 8** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

It appears that there is a grammatical error in the limitations of "comparing means for performing a **comparison** a first image read by the reading means **between** a second image subsequently read;" This phrase should be corrected to read as -- *comparing means for performing a **comparison between** a first image read by the reading means **and** a second image subsequently read; --.*

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 5 & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Courtney (US 5,969,755).

Regarding claim 1, Courtney discloses an image search apparatus, which searches an image recording means, wherein images picked up by a camera are recorded in a time sequence, for an arbitrary image (i.e., a scene change image in a video sequence is searched; see abstract), comprising:

reading means (Figs. 1 & 5) for sequentially reading images from the image recording means (20); comparing means (21-23) for performing a comparison between

Art Unit: 2622

a first image read by the reading means and a second image subsequently read (for searching a scene change); and defining means (21-23) for defining the second image as the arbitrary image when the first image and the second image are not match as a result of comparison by the comparing means (the second image is detected as the scene change image which is different from the first image); and transmitting means (29) for transmitting the second image as a search result (the second image detected as the scene change image is sent to display unit for displaying). See Figs. 1-26; col. 3, line 66 – col. 5, line 57; col. 12, lines 1-60 and col. 14, lines 1-12.

Regarding claim 2, Courtney also discloses that the comparing means compares a predetermined area (a region selected by a user) of the first image read by the reading means with the predetermined area of the second image (see Fig. 22 and col. 5, lines 12-15).

Regarding claim 5, Courtney further discloses holding means for obtaining and holding attribute data (i.e., frame number or time stamp recorded along with each image) accompanying with the second image defined as the arbitrary image based on the search result transmitted from the transmitting means; producing means for producing list data (index data in frame number or time sequence) in which the attribute data held by the holding means are organized after the reading means completes the sequential reading of images; and transfer means for transmitting the list data produced by the producing means to the display device which displays a list based on the list data

Art Unit: 2622

(see Figs. 22 and 24a-24d; col. 5, lines 12-15 and col. 14, lines 1-12. It should be noted in Figs. 22 and 24 that each detected image frame is displayed with at least a frame number as attribute data).

Regarding claim 7, Courtney clearly discloses storage means (recorder 24/database 15 shown in Fig. 5) for storing the list data (Figs. 22 & 24a-24d) produced by the producing means.

6. Claims 1, 3 & 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Koda (US 6,408,030).

Regarding claim 1, Koda discloses an image search apparatus (Figs. 1 & 9), which searches an image recording means, wherein images picked up by a camera are recorded in a time sequence, for an arbitrary image (i.e., a scene change image in a video sequence is searched; see abstract), comprising: reading means (a processor shown in Figs. 1 & 9) for sequentially reading images from the image recording means (13 or 95); comparing means (scene change detection software routines executed by the processor) for performing a comparison between a first image read by the reading means and a second image subsequently read; and defining means (the processor) for defining the second image as the arbitrary image when the first image and the second image are not match as a result of comparison by the comparing means (the second image is detected as a scene change image which is different from the first image); and

Art Unit: 2622

transmitting means (bus connected to a display unit) for transmitting the second image as a search result (see col. 2, line 53 – col. 3, line 45 and col. 4, line 22 – col. 12, line 47).

Regarding claim 3, Koda also discloses the images are recorded in the image recording means (13 or 95 shown in Figs. 1 & 9) as image data which are obtained by coding image signals inputted from the camera and by compressing the coded image signals (col. 9, lines 59-61), the image searching apparatus further comprising:

data decompressing means (decoder 96 in Fig. 9) for decompressing image data read by the reading means; decoding means for decoding image data decompressed by the data decompressing means; and transfer means for transferring the image data decoded by the decoding means to a display device (97; see col. 9, lines 61-64), wherein the comparing means performs the comparison with the image data decompressed by the data decompressing means, the reading means halts the sequential reading of images based on the search result transmitted from the transmitting means, and the data decompressing means transmits image data of only the second image defined as the arbitrary image to the decoding means based on the search result transmitted from the transmitting means (see col. 3, lines 29-45 and col. 9, lines 4-6).

Regarding claim 4, see the analysis of claim 3 for the same limitations. Furthermore, Koda discloses the data decompressing means sequentially transmits

Art Unit: 2622

image data of the second image defined as the arbitrary image and image data which are successively read and decompressed to the decoding means based on the search result transmitted from the transmitting means (col. 3, lines 29-45 and col. 11, lines 6-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koda (US 6,408,030) in view of Courtney (US 5,969,755).

Regarding claim 6, Koda discloses that the images are recorded in the image recording means (13 or 95 shown in Figs. 1 or 9) as image data which are obtained by coding image signals inputted from the camera and by compressing the coded image signals (col. 9, lines 59-61), the image searching apparatus further comprising:

data decompressing means (decoder 96 in Fig. 9) for decompressing image data read by the reading means; decoding means for decoding image data decompressed by the data decompressing means; and transfer means for transferring the image data decoded by the decoding means to a display device (97; see col. 9, lines 61-64), wherein the comparing means performs the comparison with the image data

decompressed by the data decompressing means, and the data decompressing means transmits image data of only the second image defined as the arbitrary image to the decoding means (see col. 3, lines 29-45 and col. 9, lines 4-6).

Koda also discloses holding means (memory 95) for obtaining and holding attribute data (inherent frame number for each frame) accompanying with the second image defined as the arbitrary image based on the search result transmitted from the transmitting means. However, Koda does not explicitly teach producing means for producing list data in which the attribute data held by the holding means are organized after the reading means completes the sequential reading of images, and the transfer means transmits the list data produced by the producing means to the display device which displays a list based on the list data.

Courtney teaches frame numbers (attribute data) accompanying with images including the scene change image are organized and transmitted to a display device for displaying a list of frame numbers on the display device to provide detailed information so that the user quickly recognizes the frame number where the scene change occurs during reviewing (see Courtney, Figs. 22 and 24a-24d; col. 14, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art combine teachings of Koda and Courtney to arrive at the Applicant's claimed invention for displaying a list based on attribute data of images in addition the scene change image to provide detailed information so that the user would quickly recognize the frame number where the scene change occurs during reviewing.

Regarding claim 8, see the analysis of claim 7.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



NHAN T. TRAN
Patent Examiner